Quiz on DNA Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the full name of DNA? (1 pt)
2. Draw and name the components of a Nucleotide ( 6 pts)
3. Name the 4 Nitrogen Bases. (4 pts)
4. What are the base-pairing rules for DNA? (2 pts)
5. If the sequence of nucleotides on one strand of a DNA molecule is GCCATTG, the sequence on the complementary strand is (1 pt):
   1. GGGTAAG
   2. CCCTAAC
   3. CGGTAAC
   4. GCCATTC
6. James Watson and Francis Crick (1 pt):
   1. Built a structural model of DNA
   2. Discovered DNA replication
   3. Used X-ray diffraction
   4. Discovered DNA polymerases
7. Using the analogy of DNA as a “ladder” which molecule makes up the rungs of the ladder (1 pt) :
   1. Phosphate group
   2. Sugar
   3. Hydrogen
   4. Nitrogen base
8. Explain in your own words why DNA is the molecular basis of Heredity in all living things. (4 pts)